## What is claimed is:

1. An abrasive substrate provided removably between an abrasive member and a head portion of a carry type abrasive machine,

wherein the abrasive substrate is formed of a synthetic resin molded member which is formed by a single material, and

one portion is different in hardness to another portion of surface to which the abrasive member is attached.

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2. The abrasive substrate according to claim 1, wherein the abrasive substrate is jointed to the head portion, and

a portion where is contact with the head portion is

15 lower than a portion where is not contact with the head
portion in hardness of the surface to which the abrasive
member is attached.

- 3. The abrasive substrate according to claim 1, 20 wherein a hardness in a peripheral portion of the abrasive substrate is lower than a hardness in a central portion excluding the peripheral portion.
- The abrasive substrate according to claim 3,
   wherein the central portion has a bolt insertion hole for

inserting a bolt which is used to fix the abrasive substrate to the head portion, and projections disposed around the bolt insertion hole.

- 5 5. The abrasive substrate according to claim 1, wherein the abrasive substrate is formed by a rotating disk.
- 6. The abrasive substrate according to claim 1, wherein the abrasive substrate is formed by a vibrating polygonal plate.
  - 7. The abrasive substrate according to claim 6, wherein each hardness of portions where are respectively close to vertexes of the abrasive substrate is lower than a hardness of a central portion excluding the portions where are close to vertexes.

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- 8. The abrasive substrate according to claim 1, wherein the abrasive member is an abrasive cloth or an abrasive 20 paper.
  - 9. The abrasive substrate according to claim 1, wherein a difference in the hardness between the central portion and the peripheral portion is regulated by a concavo-convex formed on a surface at a fixing side to the head portion of

the carry type abrasive machine.

- 10. The abrasive substrate according to claim 9, wherein the concavo-convex is formed by a plurality of rib-shaped projections molded on the same plane.
- 11. The abrasive substrate according to claim 10, wherein the rib-shaped projections are extended radially from a support central part of the head portion of the carry type abrasive machine toward a periphery.
- 12. The abrasive substrate according to claim 11, wherein the rib-shaped projections are formed in a multistage from the support central part toward the periphery.

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13. The abrasive substrate according to claim 10, wherein the rib-shaped projections are extended along a plurality of concentric circles around a support center of the head portion of the carry type abrasive machine.

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14. The abrasive substrate according to claim 11, wherein the rib-shaped projections are extended along a plurality of concentric circles around a support center of the head portion of the carry type abrasive machine.

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15. The abrasive substrate according to claim 10, wherein a height of the rib-shaped projection in the peripheral portion is set to be smaller than a height of the rib-shaped projection in the central portion.

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- 16. The abrasive substrate according to claim 9, wherein the concavo-convex is formed by a plurality of projections having different sizes which are molded on the same plane.
- 10 17. The abrasive substrate according to claim 1, wherein a plurality of male engaging elements which enables to join to and separate from the abrasive member are integrally formed with the abrasive substrate on a surface of the abrasive substrate at a fixing side to the abrasive member.

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18. The abrasive substrate according to claim 1, wherein a surface of the abrasive substrate at a fixing side for the abrasive member is rough.